Behavior Analytics

Fighting Crime With Big Data Analytics

Law enforcement agencies across the United States have faced severe budget cuts over the past several years, resulting in reduced staffing and increased crime in many areas. Detroit, which has been critically impacted by the economic downturn, has been consistently plagued by high crime rates. To combat this trend, the Detroit Crime Commission (DCC) was created to prevent crime, as well as to facilitate the investigation and prosecution of criminals. The Detroit Crime Commission conducts research, assists in investigations, disseminates information to the public, and helps coordinate activities to reduce crime.

Monitoring and Preventing Criminal Activity in a City Overrun by Crime

A major effort of the Detroit Crime Commission has been to identify individuals who are publicly known to be engaged in dangerous criminal activities. The Commission compiled terabytes of proprietary and public crime-related data related to specific known criminals' activities. They needed a way to quickly and easily aggregate and analyze this data to identify and prevent ongoing or planned criminal activity.

In looking at tools, the Detroit Crime Commission had tried other data collection and analysis tools but found two major shortcomings. First, while many of these tools were good at collecting a sample of the data, they needed a self-service tool that empowered them to join disparate data sets and analyze all the information at the same time. Second, existing tools did not adequately perform the relevant analyses needed by the Commission staff.

Comprehensive Analysis with Datameer

Detroit Crime Commission turned to Datameer’s big data analytics solution to integrate, analyze and visualize the terabytes of data they had already collected, as well as the data they continue to collect on an on-going basis.

First, Datameer had the built-in data connections to several cloud-based data sources they were using. This enabled the Commission staff to quickly and easily ingest data into Hadoop and Datameer for analysis. Datameer also enabled them to easily ingest and integrate proprietary data they had collected in various Excel files.

Second, Datameer’s rich point-and-click join and analysis capabilities enabled them to quickly and easily merge and visualize their disparate data, enabling them to find human and crime relationships they weren’t previously able to see by looking at thousands of rows in a spreadsheet.

New Insight into Criminal Connections and Crimes Being Planned

The analysis of the newly joined data helped Detroit Crime Commission to understand how some criminal groups organize themselves, identify relationships between various criminal entities and uncover insights related to future crimes being planned. The analysis also revealed connections between certain individuals engaged in criminal activity across various groups. The information obtained from the analysis is being used to generate reports that are shared with law enforcement.

Detroit Crime Commission plans to continue to use the Datameer solution to proactively analyze the data it is collecting so that they can continue to provide useful information to law enforcement.

“Datameer helps us move through the intelligence cycle very quickly.”
Lyle Dungy, Director of Intelligence, DCC

“A tool like Datameer is the future of law enforcement.”
Andrew Arena, Executive Director, DCC